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December 2004

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ABSTRACT

This paper describes a research project which intends to improve the business-IS/IT alignment of organisations using an innovative new method. The Targeting Method which guides strategy formulation irrespective of organisational structure or strategic planning process utilises a visual cause and effect strategic map which enhances communication, change management and knowledge sharing. Currently organisations achieve strategic IT alignment by passing through 3 levels of consciousness: awareness, integration, and alignment. Alignment takes the integration stage further by focusing on the integration of IT with the organisations fundamental strategies and core competencies. The focus on core competencies is primarily where problems start to occur in these organisations. "An apparently smooth running and highly productive core competence may mutate rapidly into a core rigidity". Even within high performance six sigma organisations there is little support for the identification of processes that may have become or will turn into core rigidities. The Targeting Method avoids this core rigidity issue by utilising cause and effect to link processes to current organisational goals.

Keywords

Alignment, Visual Communication

INTRODUCTION

It is our choices...that show what we truly are, far more than our abilities.
(J. K. Rowling, (1999) Harry Potter and the Chamber of Secrets)

Making the correct decisions is the basis of good management and good management produces desired organisational outcomes. This paper describes a research project which intends to improve the quality of decision making and communication, so that the alignment of business and information systems & information technology (IS/IT) is increased. A methodology that will guide alignment and business process improvement tasks will reduce costs and improve organisational effectiveness and efficiency. The enhancement of these activities has been strongly linked to improved organisational performance, thus returning positive financial benefits to the organisation (Luftman et al., 1999, Farrell, 2003, D'Souza, 2004).

The research project will use an operational methodology (Targeting Method, see appendix) for guiding strategy formulation that is appropriate irrespective of organisational structure or strategic planning process. The Targeting Method (TM) was developed with the support of IBM Global Services Australia, EDS Consulting, CSC, Citec, Mincom, Deloitte Touché Tohmatsu, Hitachi Data Systems and REALTECH. These companies provided their experience and knowledge in support of the development of the tool, which is used to identify and select those processes which should be improved first. These processes are what we call critical processes: defined as "*those 'few' processes which have the 'greatest' effect on the attainment of corporate strategic goals*".

The Targeting Method enhances many of the current activities within organisations such as business process management, strategic communication and six sigma methods. Six Sigma focuses on the operational performance of processes within the organisation. The Targeting Method is able to support and improve six sigma practices by identifying the criticality of processes (selection of which to improve first) and more importantly, by defining the objectives of processes in order that they assist in achieving organisational goals. That is, the Targeting Method enables the alignment of processes with organisational goals.

PREVIOUS RESEARCH IN ALIGNMENT

Although there is much interest and research in the area of business-IS/IT alignment and IT governance (there has been a move towards discussing IS/IT-business alignment as part of IT governance) there has been little thus far on practical or

operational approaches to improving alignment. During the 1980's IT alignment was considered to be part of strategic information systems planning (SISP) (Earl, 1993, Hackney et al., 2000).

Much of the research during the 1990's has been focused on understanding the issues, influences and parameters of the domain (Thomas and Dewitt, 1996). Thomas and Dewitt (1996) suggest that the research in this area can be broken up into three stages of concept building or concept testing: description, explanation and prediction. The research project does not fit neatly within any of Thomas and Dewitt's (1996) segments, though we believe its best fit is within the concept testing/ prediction area of the framework (see Table 1, page 3763). Thomas and Dewitt (1996) assert that they were unable to find examples of existing research in the concept testing/ prediction area of their framework. We do not intend to compare the approach to others as to date there is little evidence of similar tools.

	Description	Explanation	Prediction
Concept Building	Research on what variables and concepts compose strategic alignment	Explanations regarding how and/or why certain relationships among variables exist	Attempts to ascertain under what circumstances the relationships hold (when and where are the critical relationships manifested)
Concept Testing	Testing and validation of the variable measures	Documenting the relationships developed earlier usually through statistical testing	Testing competing explanations of strategic alignment's link to other organizational phenomena

Table 1-Framework for Reviewing Strategic Alignment Research
(Snow and Thomas (1993) cited by Thomas and Dewitt, 1996)

A further recent study of alignment research by Tan and Gallupe (2003) suggests that the major gap in this field is found because of the focus on 'behavioural' aspects. That is, by examining the ways in which organisations behave we have neglected the "individuals' abilities to make sense and to give meaning to events" (Tan and Gallupe, 2003) (p63). This is the managerial cognitive perspective.

	Conceptual Level	Content Level	Process Level
Behavioural	1 – Describes the concept of alignment and discusses the characteristics of the concept	2 – Tests and validates relationships between alignment and behavioural dimensions in organization context	3 - Ascertains behavioural conditions under which alignment is enabled or inhibited
	well researched	well published	emerging
Cognitive	4 – Describes the concept of alignment based upon cognitive theories and associated characteristics	5 – Tests and validates the relationships between alignment and cognitive dimensions in a managerial context	6 - Provides explanations of cognitive profiles necessary for successful alignment
	not published	not researched	not researched

Table 1 -Framework for Reviewing Business-IT Alignment Research;
(Tan and Gallupe, 2003)

Within Tan and Gallupe's (2003) framework the Targeting Method would sit across segments three (3) and six (6) which have been identified as emerging areas of research interest and an un-researched area.

Luftman's (2003) 'strategic alignment maturity assessment tool'; "provides a vehicle to evaluate where an organisation is, and where it needs to go, to attain and sustain business-IT alignment" (Luftman et al., 1999). Luftman (2003) adds in his conclusion though that "this [tool] is an important step in identifying specific actions" (added emphasis). This suggests that there is far more to be done to identify how organisations should operationalise current research knowledge in order to achieve business-IS/IT alignment.

The three research frameworks described and the comments from one of the leading authorities in alignment research (Jerry Luftman) all suggest that there remains a need for operational research such as that being proposed. Put simply, this is research which takes current theory and develops appropriate tools so that the theory is able to be effectively used within organisations.

RATIONALE OF THE PROJECT

"It is not necessary to change. Survival is not mandatory." –W. Edwards Deming

With the emergence of 'post-bureaucratic' forms of organisation, such as: the 'networked organisation' (Drucker, 1988), the 'virtual organisation' (Davidow, 1992) and the knowledge-creating company (Nonaka, 1995), Symon (2000) suggests that organisational structures now have leaner and flatter management structures and that many have outsourced functional activities (Davidow and Malone, 1992, Drucker, 1988, Nonaka and Takeuchi, 1995, Symon, 2000). Symons (2000) adds that, "these leaner organizations are envisaged as thus being more flexible and responsive to rapid environmental change". She adds that decisions are made more quickly and changes in organisational direction occur in shorter time frames.

New organisational structures are evolving, but what assists in the strategic planning processes in these forms? Tan and Gallupe (2003) suggest that most empirical alignment research can be categorised as of the behavioural type, that is, they focus on "the business strategy-IS relationship and how it affects firm performance and IS effectiveness" (Tan and Gallupe, 2003) (p57). Luftman, Papp and Brier (1999) looked at enablers and inhibitors and concluded that executives should: a) improve the relationships between business and IS functional areas, b) mutually cooperate and participate in strategy development, c) communicate effectively, d) maintain executive support and e) prioritise projects (Luftman et al., 1999).

Reich and Benbasat (2000) studied four factors; shared domain knowledge, successful IT history, connections between business and IT planning and communication between business & IS executives. They found that communication between business & IS executives had the greatest influence on alignment (Reich and Benbasat, 2000).

The implementation of strategy requires effective change management. The complexity of change increases if the strategies involve the introduction of new information systems. This occurs because technology affects the tasks, the roles, and the structures in place within organisations.

Any methodology should be of use in the three different forms of change management: planned change, emergent change and opportunistic change (Orlikowski and Hoffman, 1997). In planned change, one can meticulously plan and can involve all parties (stakeholders). In addition, one should be monitoring the progression towards these planned objectives. Emergent change occurs when those elements NOT planned for appear during the change process and need to be dealt with. The critical decision here is what to change, and what will the effects of these changes be in the overall strategy. Finally, a particular type of change may be detected: opportunistic change. This change type occurs when elements encountered during a change process are recognised to lead to immediate benefits and so one must again alter the plan to accommodate these different circumstances.

The "effective exchange of ideas and a clear understanding of what it takes to ensure successful strategies are high on the list of enablers and inhibitors to alignment" (p7) according to Luftman (2003). In 1999 Luftman, Papp and Brier provided a list of enablers and inhibitors to the improvement of business/IT alignment. Of those which are labelled as enablers at least half might be supported by improving the communication between IT and business: IT involved in strategy development, IT understands business, IT efforts are well prioritised, IT plans linked to business plans, Goals/vision are defined, Good IT/business communication (Luftman et al., 1999). It is our contention that the Targeting Method provides a tool that meets these needs.

Conclusions

The review of the literature has been able to identify that there still remains a gap in the research in which the proposed research project using the Targeting Method might provide a suitable tool with which practitioners and researchers will benefit.

THE RESEARCH OBJECTIVES

Hypotheses

Effective communication of the link between processes (functionality and systems) and organisational goals enables business- IT/IS alignment.

The Research Objectives of the Proposed Project

This project aims to test and if necessary to further develop this methodology to increase Business-IT alignment, by:

- Undertaking the real life testing of the Targeting method within organisations using large information systems
- Utilising the data from testing to improve and further develop the method so that it is generalisable and operationally effective and efficient
- Assess the benefits of the methodology using a combination of the perceptions of process stakeholders and process users

Research Questions

- Does the Targeting Method improve the effectiveness and efficiency of communication between business and IS/IT (as measured by the perceptions of process stakeholders and process users in semi-structured interviews)?

Investigative Questions

- What alignment 'influence' factors does the Targeting Method impact upon?
- Is there an increase in alignment after using the method and can this be linked to the Targeting Method?

RESEARCH APPROACH

The project intends to work with an IT outsourcing organisation (Company A) and utilise the business units of one of company A's clients as the subject of the research (Company B). The project intends to use action research which is a cyclical process of action, observation, reflection and refining, if Company A is actively involved in the research and action learning if Company A is a passive participant. Action research requires the input of two separate teams with different perspectives (business and research).

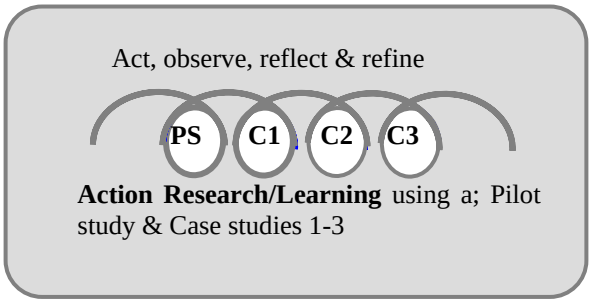

Figure 1- Action research/learning cycles

The Company A research perspectives inform the reflection and refining stages of the project in the action research approach and in the action learning there is no formal input from the Company A perspective. As can be seen in Figure 1 there is a pilot study to ensure that the approach taken is verified before use within Company B business units as three or more case studies. The case studies are part of the data collection method for each of the observation cycles.

CONCLUSIONS

The development of a methodology that will guide business –IS/IT alignment, business process management and six sigma processes will return financial benefit to organisations (Luftman et al., 1999, Farrell, 2003, D'Souza, 2004). This project is innovative as it will produce a new methodology that augments and operationalises existing alignment theory (Tan and Gallupe, 2003, Thomas and Dewitt, 1996, Luftman, 2003, Ball et al., 2003).

The output will be a generalisable methodology for identifying the cause and effect relationships between strategy, goals and objectives and the underlying business processes contributing to the attainment of business strategy. The developed maps and results of interviews will be used to guide the planning, configuration and customisation decisions inherent in IT/business management. The multi-perspective view of processes obtained using semi-structured interviews will also inform the change management program associated with such systems and most importantly improve business-IS/IT alignment.

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Appendix: Description of Targeting Method

The diagram on the right is a representation of the ten step targeting method in process model form. Each step is indicated by a dotted horizontal line and a circled number on the left. Some steps have more than one part and these are shown by the rectangular boxes in the centre. The inputs for the model are on the right and the outputs of the model are on the left.

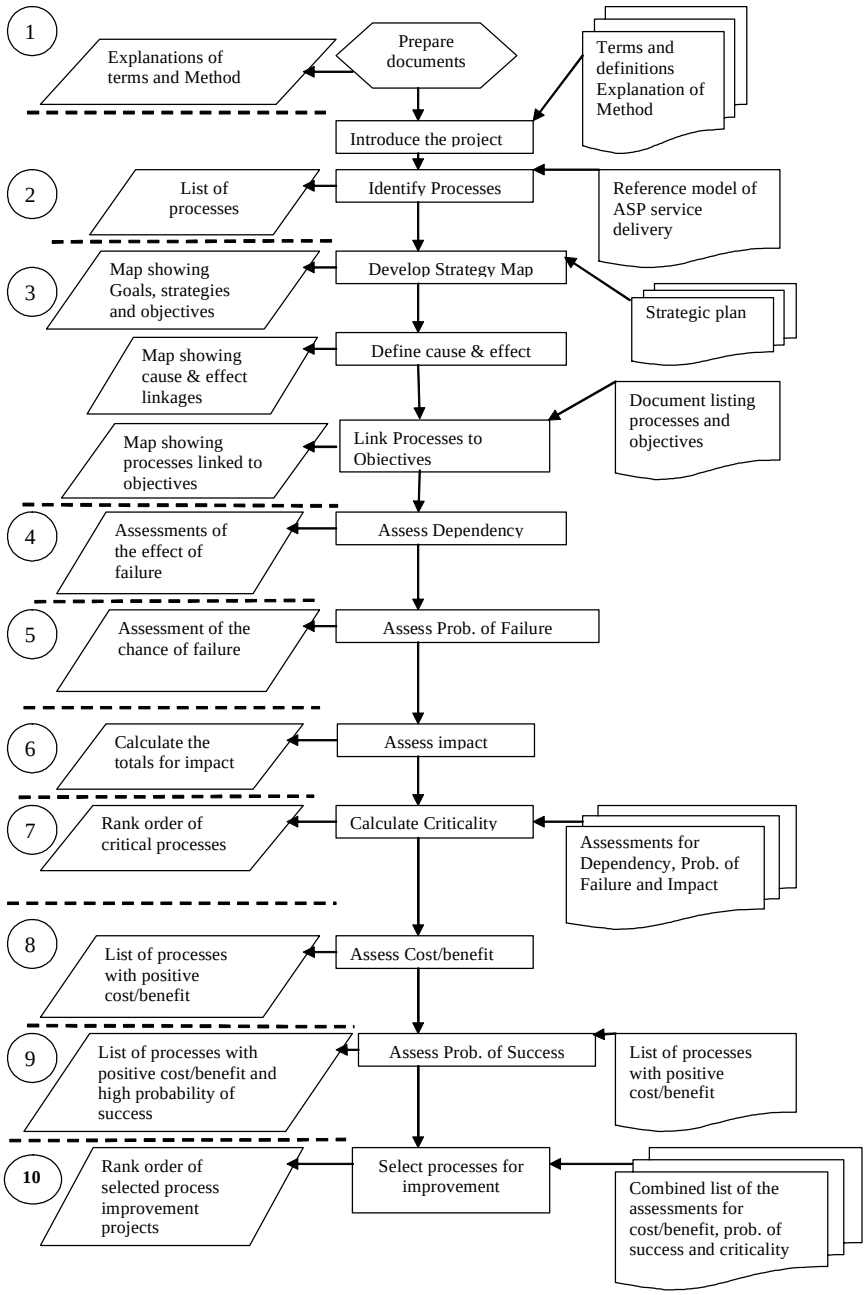

Diagram of a single cycle of the Research plan